ABSTRACT

When a fixed polygonal plane patch is called a polygonal plane patch of level 0 and when each vertex of such polygonal plane patch is called a shape composition point of level 0, a normal line of level 0 is set on each shape composition point of level 0, and each normal line of level 0 is decomposed on an equivalent tangent plane to the normal line of level 0. Moreover, a tangent line of level 0 is set by a decomposition in a direction equal to or in the vicinity of the edge of the polygonal plane patch of level 0; and based upon two tangent lines of level 0, a normal line is set on a shape composition point and on a shape composition point of level 1. A plane shape is formed by repeated controls of the above one after another.